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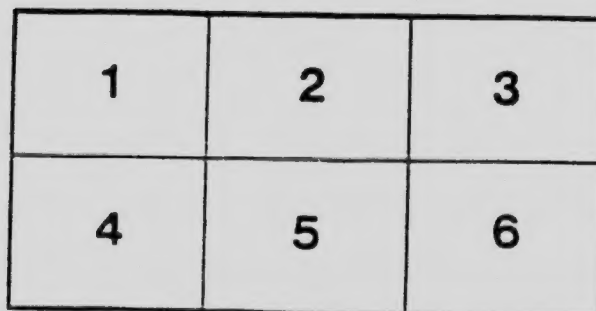
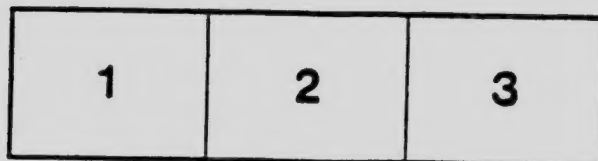
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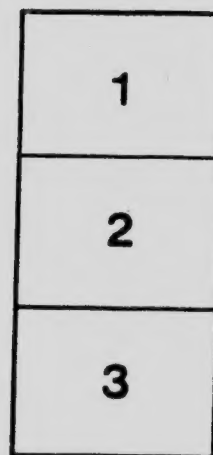
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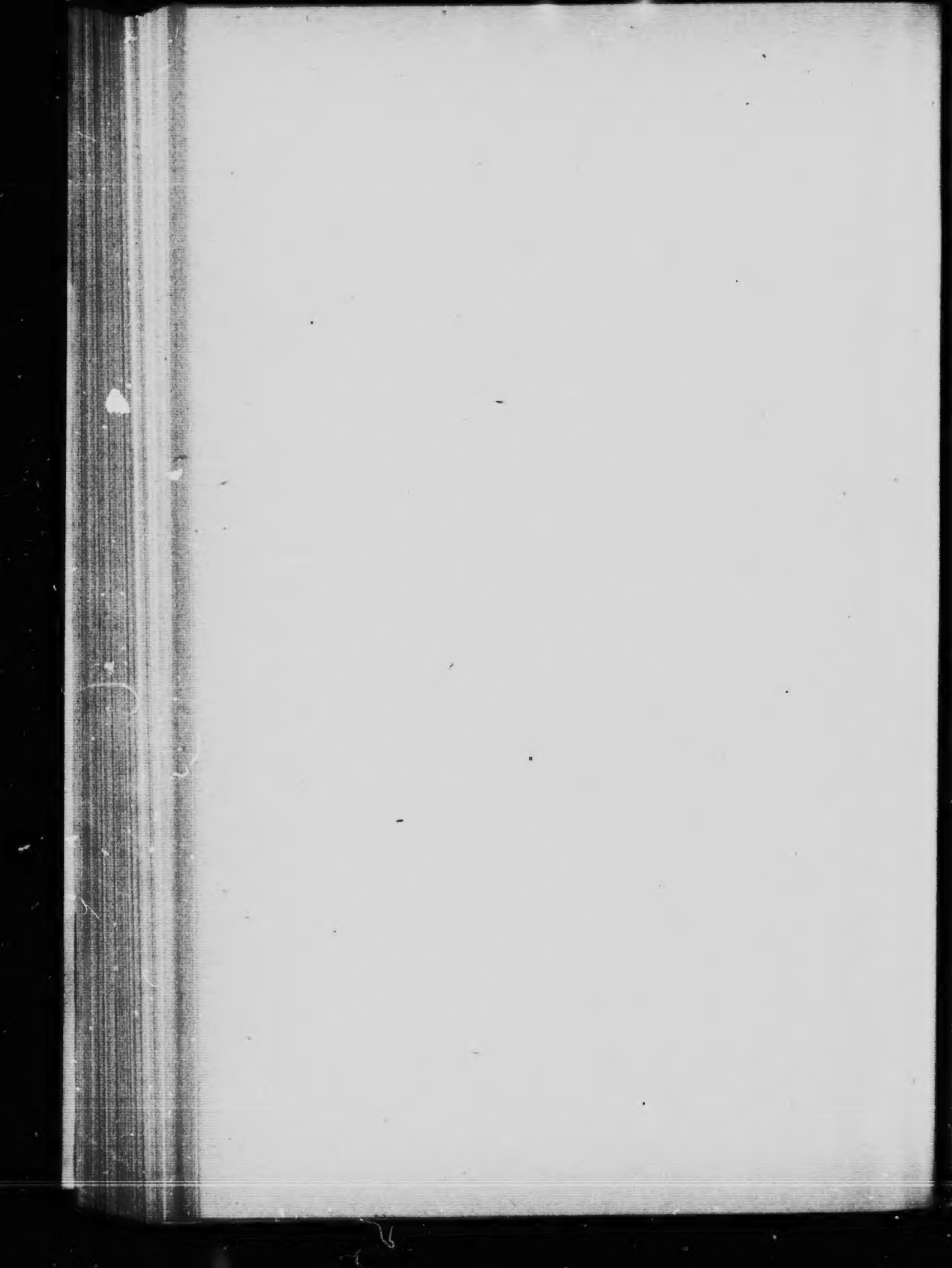
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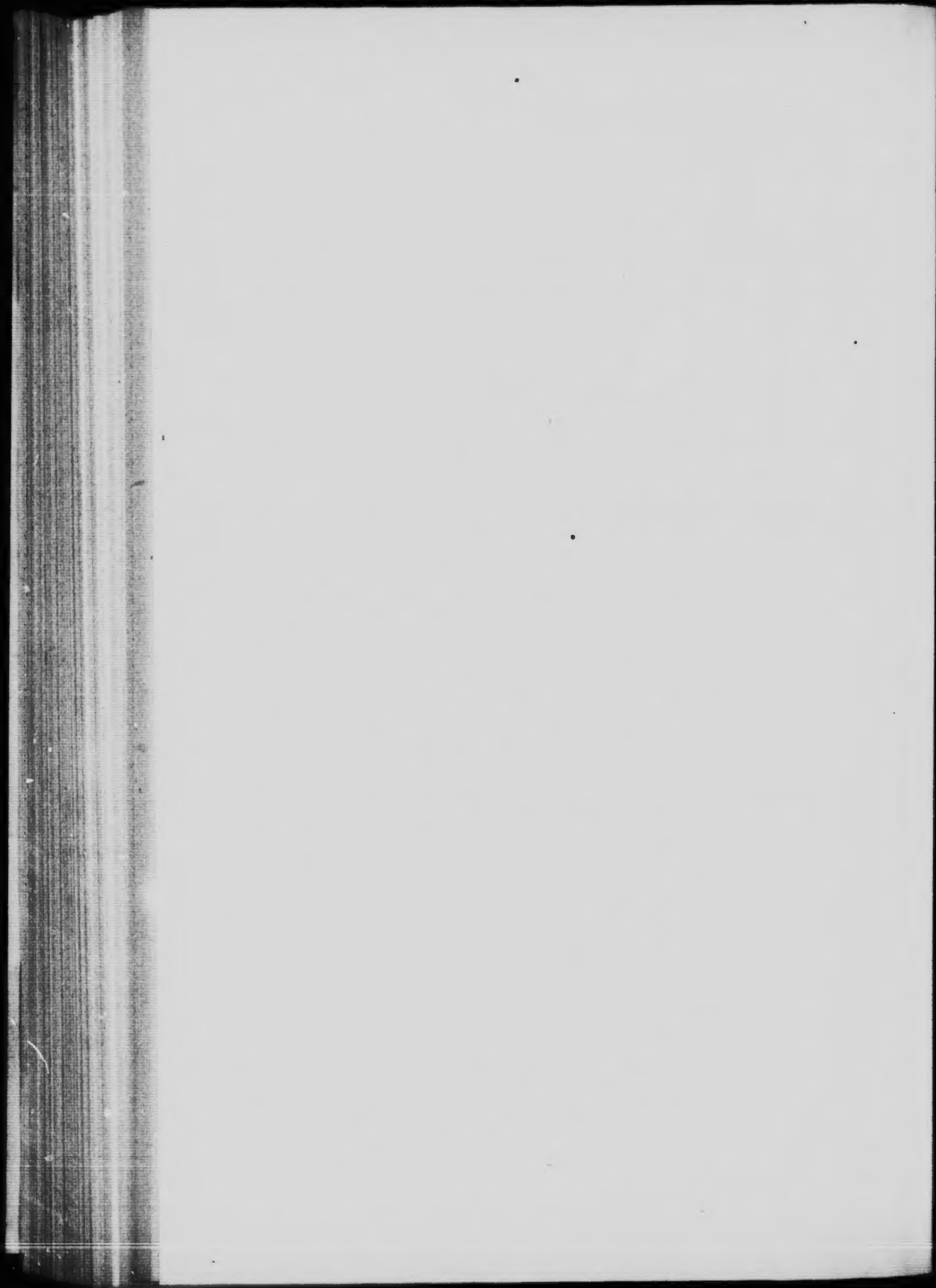




LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA

BULLETIN No. 341

HOUSEHOLD AMMONIA



NOTES AND COMMENTS.

Under this heading, as occasion arises, the Bulletins issued by this Department will contain, as an appendix, such comment as may seem necessary or advisable upon matters relating to the work of the Department in connection with the administration of the Adulteration Act, the Fertilizers Act, the Feeding Stuffs Act or the Proprietary Medicines Act.

It frequently happens that correspondents ask information regarding the above Acts, of such a nature that the matter in question possesses general interest, and comment upon it would prove acceptable and useful to others than the immediate questioner. In such cases the reply may find a place in these notes. For convenience of reference these notes will be numbered in series.

A. MCGILL,
Chief Analyst.

LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA

BULLETIN No. 341

HOUSEHOLD AMMONIA

OTTAWA, June 15, 1916.

J. U. VINCENT, Esq.,
Deputy Minister of Inland Revenue.

SIR,—Of late years Ammonia has come to be largely in use in the household, as a detergent and for the convenience of persons in whose hands the strong solution of ammonia would be attended with danger, manufacturers have placed on the market a dilute ammonia under the name of Household Ammonia, which finds very extensive sale. For the most part, this article is simply a dilution with water of the strong solution (Liquor Ammoniae Fortis) of the Pharmacopœia. This latter is required to contain 32.5 per cent by weight of Ammonia (NH_3). A weaker solution is also defined by the Pharmacopœia (Liquor Ammoniae) containing 10 per cent by weight of Ammonia. It may be mentioned here that the Ammonia of the French Codex contains only 20.18 per cent and the Aqua Ammoniae Fortior of the United States Pharmacopœia, 28 per cent by weight of Ammonia.

Some market samples of the article contain, in addition to Ammonia, soaps of various kinds, and other ingredients.

In January 1914, Professor J. F. Snell of Macdonald College, presented to the Canadian Section of the Society of Chemical Industry a study of Commercial Household Ammonia in Canada. (See Journal of the Society, 1914, p. 1177) and recommended that a more extended inspection of the articles be made under the Adulteration Act.

Ammonia, considered as a drug, undoubtedly comes under the purview of this Act. While Household Ammonia cannot be described as a drug in the strict sense, it has been thought well, in the interest of the public generally, to examine this article, and the present report deals with the more or less complete analysis of one hundred and sixty-two (162) samples, purchased by our inspectors as Household Ammonia, in December, January and February last.

Professor Snell reports upon the Analysis of 10 samples of clear ammonias, 5 samples of so-called cloudy Ammonias (containing soaps), and 6 samples of solid Ammonias (essentially carbonate of ammonia) and finds, for the liquid preparations, that "the household Ammonia sells wholesale at from 4 to 14 times the wholesale value of the Ammonia contained in it. The retail price is from 6 to 20 times the wholesale value of the Ammonia," and adds, "How much more economical it would be to buy commercial concentrated ammonia, and dilute it with good soft water."

There is of course a certain convenience in purchasing the article in a form ready for use, and that the average consumer is willing to pay for this service is amply evident when we consider the extensive sale of many foods in neat packages, which could be purchased at much less cost in bulk. It is however, a reasonable claim, when the purchaser asks how much in excess of its minimum market value he pays for the advantage of package, or in the case of Household Ammonia, of dilution and package. It is certainly with surprise and indignation that the purchaser learns of the six-fold increase found by Professor Snell.

With a view to establishing as far as possible, a relation between value and price of these articles I have tabulated (see Table II) the results of analysis, grouping together samples bearing the same name (Brand). On account of the difficulty attending exact measurement of containers the information given in Table II must be regarded as approximate only.

From this it is seen that one unit of Ammonia, purchased in 12 ounce bottle, costs from 1.877 of a cent (cheapest) to 12.918 cents; the average cost being about 3 cents.

In order to obtain some idea of the cost of the same quantity of Ammonia, in twelve ounce package, bottle included, I caused four samples to be purchased in Ottawa, and Hull, and found these to cost 35 cents, in each case. The Ammonia values were found to be 23.14; 22.54, 21.98 and 23.24; giving a mean value of 22.72 per cent. The value per unit, is thus found to be 1.540 cents.

It is to be noted that this is the cost of a pure Ammonia, and a less highly purified article may be purchased at a considerably lower price. In a general way it may be said that our examination of so-called Household Ammonia essentially substantiates the findings of Professor Snell, and leads to the conclusion that the consumer can effect a substantial saving, by purchasing liquid Ammonia and diluting with water to suit his purposes.

I would respectfully suggest publication of this report as Bulletin No. 341. It contains information which will be helpful to many questioners regarding possible household economies.

I remain, sir,

Your obedient servant,

A. MCGILL,

Chief Analyst.

TABLE I—BULLETIN No. 341—

| Date of Collection. | Nature of Sample. | No. of Sample. | Name and Address of Vendor. | Cost. | | Name and Address of Manufacturer or Furnisher, as given by the Vendor. | |
|---------------------|-------------------|----------------|-----------------------------|-----------|--------|--|------------|
| | | | | Quantity. | Cents. | Manufacturer. | Furnisher. |

DISTRICT OF NOVA SCOTIA—

| | | | | | | | |
|---------|--------------------|-------|--------------------------|---------|----|--|----------------------------------|
| 1915. | | | | | | | |
| Dec. 29 | Household Ammonia. | 60854 | A. J. Roop, New Glasgow. | 3 bots. | 45 | Sawyer Crystal Blue Co., Boston, Mass. | R. McGregor & Sons, New Glasgow. |
| " 29 | " | 60855 | S. M. Lochhart & Co. " | 3 " | 35 | Sultana Ltd., Montreal. | Mfr. |
| " 31 | " | 60856 | R. McNabb, Trenton, N.S. | 3 " | 35 | Alpha Chem. Co., Berlin, Ont. | " |

DISTRICT OF PRINCE EDWARD ISLAND—

| | | | | | | | |
|---------|--------------------|-------|---------------------------------|---------|----|--------------------------------|-------|
| Dec. 17 | Household Ammonia. | 60463 | Beer & Goff, Charlotte-town. | 3 bots. | 36 | Sultana Ltd. Montreal. | ..... |
| " 17 | " | 60464 | P. A. Smith, Charlotte-town. | 3 " | 36 | Dearborn Co., Ltd., St. John. | ..... |
| " 17 | " | 60465 | J. G. Passmore, Charlotte-town. | 3 " | 30 | Stuart & Foster Ltd., Toronto. | ..... |
| " 24 | " | 60466 | J. A. Cronin, Charlotte-town. | 3 " | 30 | Dearborn Co., Ltd., St. John. | ..... |
| " 24 | " | 60467 | L. C. Worthy, Charlotte-town. | 3 " | 36 | Bee Starch Co., Montreal. | ..... |
| " 24 | " | 60468 | J. M. McQuaid, Charlotte-town. | 3 " | 36 | Alpha Chem. Co., Berlin, Ont. | ..... |

DISTRICT OF NEW BRUNSWICK—

| | | | | | | | |
|---------|--------------------|-------|-----------------------------------|---------|----|----------------------------------|-------|
| Dec. 13 | Household Ammonia. | 66281 | W. A. Simonds, St. John. | 3 bots. | 30 | Nat. Drug & Chem. Co., St. John. | ..... |
| " 13 | " | 66282 | Nat. Drug & Chem. Co., St. John. | 3 " | 30 | Vendors .. | ..... |
| " 13 | " | 66283 | Dearborn & Co., St. John. | 3 " | 25 | " ..... | ..... |
| " 21 | " | 66284 | The Canadian Drug Co., | 3 " | 30 | " ..... | ..... |
| 1916. | | | | | | | |
| Jan. 11 | " | 66285 | M. E. Doohan, Fredericton | 3 " | 30 | Dearborn & Co., St. John. | ..... |
| " 13 | " | 66286 | Yerxa Grocery Co., Woodstock. | 3 " | 25 | Stuart & Foster Ltd., Toronto. | ..... |
| Feb. 8 | " | 66287 | W. B. McKay, Ltd., Sussex. | 3 " | 30 | W. F. Hatheway Co., St. John. | ..... |
| " 8 | " | 66288 | Smith Bros., Sussex | 3 " | 30 | Dearborn & Co., St. John. | ..... |
| " 8 | " | 66289 | Mrs. P. White, Moncton. | 3 " | 30 | Baird Co., Ltd., Woodstock. | ..... |
| " 11 | " | 66290 | J. B. Snowball Co. Ltd., Chatham. | 3 " | 30 | Stuart & Foster Ltd., Toronto. | ..... |

HOUSEHOLD AMMONIA.

| Inspector's Report, (Is not an expression of opinion.) | Name of Brand. | Results of Analysis. | | | | No. of Sample. | Remarks, and Opinion of the Chief Analyst. |
|--|----------------|----------------------------|-------------------|------|-------------------|----------------|--|
| | | Ammonia N.H ₃ . | Dissolved Solids. | Ash. | Specific Gravity. | | |

W. A. PETIPAS, TEMPORARY INSPECTOR.

| | | p. c. | p. c. | p. c. | | |
|---------------------|------|-------|-------|-------|-------|--|
| Sawyer's..... | 7.85 | 0.019 | 0.010 | ..... | 60854 | |
| Sultana..... | 4.36 | 0.151 | 0.132 | ..... | 60855 | |
| Alpha Chem. Co. ... | 3.19 | 0.029 | 0.008 | ..... | 60856 | |

WM. A. WEEKS, INSPECTOR.

| Sultana..... | 4.02 | 0.038 | 0.021 | ..... | 60463 | |
|---------------------|------|-------|-------|-------|-------|--|
| Dearborn..... | 4.69 | 0.031 | 0.012 | ..... | 60464 | |
| Sun..... | 2.58 | 0.011 | 0.006 | ..... | 60465 | |
| Dearborn..... | 4.66 | 0.028 | 0.011 | ..... | 60466 | |
| Bee..... | 2.73 | 0.012 | 0.006 | ..... | 60467 | |
| Alpha Chem. Co. ... | 3.20 | 0.019 | 0.003 | ..... | 60468 | |

JOHN C. FERGUSON, INSPECTOR

| Simonds..... | 2.98 | 0.053 | 0.041 | ..... | 66281 | |
|--------------------|------|-------|-------|-------|-------|--|
| Nat. Drug Co..... | 6.98 | 0.017 | 0.012 | ..... | 66282 | |
| Dearborn..... | 4.69 | 0.036 | 0.022 | ..... | 66283 | |
| Canada Drug Co.... | 4.98 | 0.043 | 0.030 | ..... | 66284 | |
| Dearborn..... | 4.36 | 0.081 | 0.015 | ..... | 66285 | |
| Sun..... | 3.41 | 0.014 | 0.007 | ..... | 66286 | |
| Hatheway..... | 2.85 | 0.043 | 0.036 | ..... | 66287 | |
| Dearborn..... | 4.24 | 0.047 | 0.014 | ..... | 66288 | |
| Baird..... | 2.41 | 0.010 | 0.005 | ..... | 66289 | |
| Sun..... | 3.39 | 0.012 | 0.007 | ..... | 66290 | |

TABLE I—BULLETIN No. 341—

| Date of Collection. | Nature of Sample. | No. of Sample. | Name and Address of Vendor. | Cost. | | Name and Address of Manufacturer or Furnisher, as given by the Vendor. | |
|---------------------|-------------------|----------------|-----------------------------|-----------|--------|--|------------|
| | | | | Quantity. | Cents. | Manufacturer. | Furnisher. |

DISTRICT OF QUEBEC CITY—

| | | | | | | | |
|---------|----------------|-------|--|---------|------|---------------|---------------------|
| 1915. | | | | | | | |
| Dec. 22 | Ammonique dom. | 56632 | E. Martel, 1078 St. Valier, Quebec. | 3 bots. | 75 | Vendor | |
| " 22 | " | 56633 | J. Masson, 808 St. Valier, Quebec. | 3 " | 45 | ..... | N. D. & C. Co. |
| " 23 | " | 56634 | J. B. Giroux, 385 St. Joseph, Quebec. | 3 " | 75 | ..... | J. E. Livernois. |
| " 23 | " | 56635 | A. Leclerc, 243 St. Joseph, Quebec. | 3 " | 60 | ..... | Unknown |
| " 23 | " | 56636 | W. Brunet Cie, 144 St. Joseph, Quebec. | 3 " | 60 | ..... | J. Comen, Montreal. |
| " 23 | " | 56637 | J. Plamondon, 122 St. Joseph, Quebec. | 3 " | 60 | Unknown | |
| " 24 | " | 56638 | Dr. Gagnon, 28 St. Pierre, Quebec. | 3 " | 75 | ..... | Dr. Ed. Morin. |
| " 24 | " | 56639 | " " " | 3 " | 45 | Unknown | |
| " 24 | " | 56640 | Dr. Ed. Morin, 113 de la Montagne, Quebec. | 3 " | 45 | " | |
| " 24 | " | 56641 | Laroche & Co., 4 de la Fabrique, Quebec. | 3 " | 1.05 | " | |

DISTRICT OF QUEBEC PROVINCE—J. E. AUDET, O. BROCHU,

| | | | | | | | |
|---------|------------|-------|-------------------------------------|---------|----|-----------------------------|--------------------------|
| 1915. | | | | | | | |
| Dec. 23 | Ammonia... | 3664 | J. E. Gagne, Ste. Maxime, Quebec. | 2 bots. | 30 | Dr. Ed. Morin, Quebec. | |
| " 23 | " | 3666 | J. Dussault, St. Henedine, Quebec. | 2 " | 30 | Bee Starch Co., Montreal. | |
| 1916. | | | | | | | |
| Jan. 11 | " | 3671 | W. J. Doyle, St. Edward, Quebec. | 3 " | 45 | Whitehead & Turner, Quebec. | |
| " 14 | " | 3677 | Dorchester Lumber, St. Malachi. | 3 " | 45 | Sultana, Ltd., Montreal. | |
| " 29 | " | 3683 | G. Ed. Couture, Levis. | 3 " | 30 | J. B. Paine Co., Toronto. | |
| 1915. | | | | | | | |
| Dec. 21 | " | 4437 | L. N. Roy, St. Valier. | 3 " | 75 | Sultana, Montreal. | |
| " 21 | " | 4439 | Eugene Bolduc, St. Valier, Toronto. | 3 " | 45 | Stuart & Foster, Toronto. | |
| " 22 | " | 4445 | J. A. Lemieux, St. Michel, Toronto. | 3 " | 60 | J. B. Paine Co., Toronto. | |
| " 22 | " | 4448 | Geo. Roy, St. Michel. | 3 " | 30 | Sultana, Montreal. | |
| " 30 | " | 72233 | A. E. Michson, Montmagny. | 3 " | 30 | Sapho Mfg. Co., Montreal. | |
| " 30 | " | 72234 | Dr. Jas. Gagnon, Montmagny. | 3 " | 60 | ..... | J. E. Livernois, Quebec. |

HOUSEHOLD AMMONIA.

| Inspector's Report. (Is not an expression of opinion.) | Name of Brand. | Results of Analysis. | | | | No. of Sample. | Remarks and Opinion of the Chief Analyst. |
|---|----------------|------------------------------|----------------------|------|----------------------|----------------|---|
| | | Ammonia NH ₃ . | Dissolved Solids. | Ash. | Specific Gravity. | | |

F. X. W. E. BELAND, INSPECTOR.

| | | p.c. | p.c. | p.c. | | |
|--|-----------|-------|------|------|--|-------|
| | | 23.80 | | | | 56632 |
| | | 5.95 | | | | 56633 |
| | | 24.80 | | | | 56634 |
| | | 23.50 | | | | 56635 |
| | | 10.45 | | | | 56636 |
| | | 7.85 | | | | 56637 |
| | Hartshorn | 6.95 | | | | 56638 |
| | | 15.64 | | | | 56639 |
| | Hartshorn | 7.65 | | | | 56640 |
| | | 6.64 | | | | 56641 |

T. GENDREAU, A. PELLETIER AND N. CADIEUX, TEMPORARY INSPECTORS.

| | | 6.42 | 0.067 | 0.043 | | 3664 |
|--|-----------|-------|-------|-------|--|-------|
| | Bee | 3.23 | 0.013 | 0.007 | | 3666 |
| | Sun | 5.46 | 0.017 | 0.008 | | 3671 |
| | Sultana | 3.57 | 0.030 | 0.020 | | 3677 |
| | Bulldog | 2.59 | 0.023 | 0.015 | | 3683 |
| | Sultana | 2.15 | | | | 4437 |
| | Sun | 2.51 | | | | 4439 |
| | Bulldog | 1.87 | | | | 4445 |
| | Sultana | 3.86 | | | | 4448 |
| | Eaphe | 2.41 | | | | 72333 |
| | Hartshorn | 16.22 | | | | 72334 |

TABLE I—BULLETIN No. 341—

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|---------------------|-------------------|----------------|-----------------------------|-----------|--------|---|------------|
| | | | | Quantity. | Cents. | Manufacturer. | Furnisher. |

DISTRICT OF QUEBEC CITY—

| | | | | | | | |
|---------|------------|------|---|---------|----|-----------------------------|------------------------|
| 1915. | | | | | | | |
| Dec. 22 | Ammonia... | 4920 | P. E. Danjous & Fils, Bio. | 1 chrp | 15 | Sultana Co., Mont- real. | |
| " 18 | " .. | 346 | Eugene Fournier, St. Jerome. | 3 bots. | 60 | | |
| " 18 | " .. | 348 | Pierre Simard, St. Jerome | 3 " | 45 | Sapho Mfg., Co. | |
| " 28 | " .. | 364 | Napoleon Hetu, St. Agathe des Monts. | 3 " | 45 | Stuart & Foster. | |
| 1916. | | | | | | | |
| Jan. 7 | " .. | 376 | Belair & Paquette, St. Eustache deux Mont- agnes. | 3 " | 36 | | Laporte & Mar- tin. |
| " 7 | " .. | 377 | Boileau & Aubu, St. Eustache deux Mont- agnes. | 3 " | 30 | | Stuart & Foster |

DISTRICT OF THREE RIVERS—

| | | | | | | | |
|---------|------------|-------|-----------------------------------|---------|----|------------------------------|--|
| 1915. | | | | | | | |
| Dec. 18 | Ammonia... | 69217 | L. A. Caisse, Berthier- ville. | 3 bots. | 39 | Sapho Mfg., Co. | |
| 1916. | | | | | | | |
| Jan. 3 | " .. | 69221 | J. A. Boisvert, Joliette. | 3 " | 30 | Sultana Co., Mont- real. | |
| " 3 | " .. | 69223 | L. P. Crepeau, Joliette.. | 3 " | 30 | Stuart & Foster, Toronto. | |
| " 4 | " .. | 69225 | Rodrique Deblois, St. Thomas. | 3 " | 30 | Stuart & Foster, Toronto. | |

DISTRICT OF EASTERN TOWNSHIPS—

| | | | | | | | |
|---------|------------|-------|-------------------------------|---------|----|---------------------------|--|
| Feb. 10 | Ammonia... | 67559 | Gosselin & Paradis, Magog. | 3 bots. | 30 | | |
| " 10 | " .. | 67560 | J. O. Donigan, Magog... | 3 " | 30 | Nat. Drug. & Chem. Co. | |
| " 11 | " .. | 67561 | H. Paré, Granby..... | 3 " | 25 | | |
| " 11 | " .. | 67562 | Mercure & Frere, Granby | 3 " | 30 | | |

HOUSEHOLD AMMONIA.

| Inspector's Report. (Is not an expression of opinion.) | Name of Brand. | Results of Analysis. | | | | No. of Sample. | Remarks and Opinion of the Chief Analyst. |
|---|----------------|------------------------------|----------------------|------|----------------------|----------------|---|
| | | Ammonia NH ₃ . | Dissolved Solids. | Ash. | Specific Gravity. | | |

Concluded.

| | | p. c. | p. c. | p. c. | | |
|-------|-------------|-------|-------|-------|-------|------|
| ..... | ..... | 3.85 | 2.500 | 0.076 | ..... | 4920 |
| ..... | ..... | 7.56 | ..... | ..... | ..... | 346 |
| ..... | Sapho | 3.86 | ..... | ..... | ..... | 345 |
| ..... | Sun | 4.31 | ..... | ..... | ..... | 364 |
| ..... | " ..... | 5.10 | ..... | ..... | ..... | 376 |
| ..... | " ..... | 4.50 | ..... | ..... | ..... | 377 |

DR. V. P. LAVALLEE, TEMPORARY INSPECTOR.

| | | | | | | |
|-------|---------------|------|-------|-------|-------|-------|
| ..... | Sapho | 2.41 | ..... | ..... | ..... | 69217 |
| ..... | Sultana | 4.32 | ..... | ..... | ..... | 69231 |
| ..... | Sun | 6.19 | ..... | ..... | ..... | 69223 |
| ..... | " ..... | 4.82 | ..... | ..... | ..... | 69225 |

J. J. COSTIGAN, ACTING INSPECTOR.

| | | | | | | |
|---------------|----------------|------|-------|-------|-------|-------|
| Sultana | Sultana | 4.32 | ..... | ..... | ..... | 67560 |
| ..... | National | 5.64 | ..... | ..... | ..... | 67560 |
| Entente | Entente | 1.29 | ..... | ..... | ..... | 67561 |
| Sun | Sun | 5.18 | ..... | ..... | ..... | 67562 |

TABLE I—BULLETIN No. 341—

| Date of Collection. | Nature of Sample. | No. of Sample. | Name and Address of Vendor. | Cost. | | Name and Address of Manufacturer or Furnisher as given by the Vendor. | |
|---------------------|-------------------|----------------|-----------------------------|-----------|--------|---|------------|
| | | | | Quantity. | Cents. | Manufacturer. | Furnisher. |

DISTRICT OF MONTREAL—

| | | | | | | | |
|--------|------------|-------|--|---------|----|------------------------------|-------|
| 1916. | | | | | | | |
| Feb. 7 | Ammonia... | 67251 | A. Wolgensinger, 394 Charlevoix St., Montreal. | 3pkts. | 15 | S. F. Laurason Co. | ..... |
| " 7 | " .. | 67252 | R. Mercier, 420 Charlevoix St., Montreal. | 3 " | 15 | Pugsley, Dingman & Co., Ltd. | ..... |
| " 8 | " .. | 67253 | N. Lelande, 361 Charlevoix St., Montreal. | 3 bots. | 30 | Stuart & Foster. | ..... |
| " 8 | " .. | 67254 | Boisvert Bros., 354 Hibernia St., Montreal. | 3 " | 30 | Bee Starch Co. | ..... |
| " 8 | " .. | 67255 | R. Gough, 351 Hibernia St., Montreal. | 3 pkgs | 15 | Pugsley, Dingman Co., Ltd. | ..... |
| " 8 | " .. | 67256 | D. Hadden, 1 Rushbrooke St., Montreal. | 3 " | 30 | S. F. Laurason. | ..... |
| " 8 | " .. | 67257 | J. Stetson, 264 Hibernia St., Montreal. | 3 bots. | 30 | Sultana, Ltd. | ..... |
| " 8 | " .. | 67258 | N. Fortin, 80 Coleraine St., Montreal. | 3 " | 30 | Unknown | ..... |
| " 9 | " .. | 67259 | R. Ekin, 601 Wellington St., Montreal. | 3 pkgs | 15 | Bee Starch Co. | ..... |
| " 9 | " .. | 67260 | S. Whitehead, 291 Charron St., Montreal. | 3 bots. | 30 | Sultana, Ltd. | ..... |

DISTRICT OF VALLEYFIELD—

| | | | | | | | |
|---------|------------|-------|-------------------------------|---------|----|-------------------------------|-------|
| Jan. 28 | Ammonia... | 62971 | E. Beauchamp, St. Lambert. | 3 bots. | 45 | Hervay Chem. Co., St. Basile. | ..... |
| " 28 | " .. | 62972 | Graham & Hunter, St. Lambert. | 3 " | 30 | Stuart & Foster, Toronto. | ..... |

DISTRICT OF OTTAWA—

| | | | | | | | |
|--------|--------------------|-------|--|---------|----|------------------------------------|-------|
| 1915. | | | | | | | |
| Dec. 7 | Household Ammonia. | 70553 | A. M. Parkinson, Kemptville. | 3 bots. | 45 | Sultana, Ltd., Montreal. | ..... |
| " 7 | " .. | 70554 | Mundle & Percival, Kemptville. | 3 pkgs | 30 | Eze Mfg. Co., Ltd., Toronto. | ..... |
| " 11 | " .. | 70568 | W. G. Becksted, Morrisburg. | 3 " | 30 | Pugsley, Dingman & Co., Toronto. | ..... |
| " 11 | " .. | 70569 | W. & J. Meikle, Morrisburg. | 3 bots. | 30 | Stuart & Foster, Ltd., Toronto. | ..... |
| " 14 | " .. | 70580 | T. McCormick & Son, Arnprior. | 3 pkgs | 15 | S. F. Laurason & Co., London, Ont. | ..... |
| " 24 | " .. | 70630 | E. Birnns, Eganville. | 3 " | 30 | Bee Starch Co., Montreal. | ..... |
| " 29 | " .. | 70642 | Eugene Doucet, Dupont and Papineau Sts., Hull. | 3 " | 15 | A. Hutchinson & Co., Toronto. | ..... |
| " 30 | " .. | 70650 | King George Grocery, Somerset St., Ottawa. | 3 bots. | 30 | Bee Starch Co., Montreal. | ..... |
| 1916. | | | | | | | |
| Jan. 4 | " .. | 70657 | J. H. McKen, 901 Bank St., Ottawa. | 3 pkgs | 15 | Eze Mfg. Co., Toronto. | ..... |

HOUSEHOLD AMMONIA.

| Inspector's Report. (Is not an expression of opinion.) | Name of Brand. | Results of Analysis. | | | | No. of Sample. | Remarks and Opinion of the Chief Analyst. |
|--|----------------|----------------------------|-------------------|------|-------------------|----------------|---|
| | | Ammonia N.H ₃ . | Dissolved Solids. | Ash. | Specific Gravity. | | |

D. J. KEARNEY, INSPECTOR.

| | | p. c. | p. c. | p. c. | | |
|-------|------------------|-------|-------|-------|-------|--|
| ..... | Laurason's | 2.04 | ..... | ..... | 67251 | |
| ..... | Handy | 3.06 | ..... | ..... | 67252 | |
| ..... | Sun | 2.65 | ..... | ..... | 67253 | |
| ..... | Bee | 3.09 | ..... | ..... | 67254 | |
| ..... | Handy | 4.08 | ..... | ..... | 67255 | |
| ..... | Laurason's | 3.40 | ..... | ..... | 67256 | |
| ..... | Sultana | 4.40 | ..... | ..... | 67257 | |
| ..... | Murray's | 4.97 | ..... | ..... | 67258 | |
| ..... | Bee | 2.04 | ..... | ..... | 67259 | |
| ..... | Sultana | 4.03 | ..... | ..... | 67260 | |

J. J. COSTIGAN, ACTING INSPECTOR.

| | | | | | | |
|-------|-------------------|------|-------|-------|-------|--|
| ..... | Chemical Co. | 4.66 | ..... | ..... | 62971 | |
| ..... | Sun | 3.85 | ..... | ..... | 62972 | |

J. A. RICKY, INSPECTOR.

| | | | | | | |
|---|-------------------|------|-------|-------|-------|--|
| Red Seal | Sultana | 3.50 | ..... | ..... | 70653 | |
| Star, contents equal to 6 qts. Liq. Ammonia. Absolutely pure. | Star | 1.70 | ..... | ..... | 70654 | |
| ..... | Handy | 2.23 | ..... | ..... | 70658 | |
| Harvey's Sun | Sun | 4.66 | ..... | ..... | 70659 | |
| Snowflake | Laurason's | 2.89 | ..... | ..... | 70680 | |
| Bee Brand | Bee | 1.70 | ..... | ..... | 70690 | |
| Good | Hutchison's | 2.45 | ..... | ..... | 70612 | |
| Bee Brand | Bee | 2.77 | ..... | ..... | 70630 | |
| ..... | Creacent | 4.37 | ..... | ..... | 70657 | |

TABLE I—BULLETIN No. 341—

| Date of Collection. | Nature of Sample. | No. of Sample. | Name and Address of Vendor. | Quantity. | Cents. | Name and Address of Manufacturer or Furnisher, as given by the Vendor. | |
|---------------------|-------------------|----------------|-----------------------------|-----------|--------|--|------------|
| | | | | | | Manufacturer. | Furnisher. |

DISTRICT OF KINGSTON—

| | | | | | | | |
|---------|--------------------|-------|--------------------------------------|---------|----|-------------------------------|--|
| 1915. | | | | | | | |
| Dec. 10 | Household Ammonia. | 71781 | Geo. Mahood, Kingston. | 3 bots. | 30 | Vendor..... | |
| " 13 | " | 71782 | Wallbridge & Clark, Belleville. | 3 " | 30 | Stuart & Foster, Toronto. | |
| " 13 | " | 71783 | Ed. A. Kellaway, Belleville. | 3 " | 30 | " " | |
| " 13 | " | 71784 | The Belleville Pharmacy, Belleville. | 3 " | 35 | Vendor..... | |
| " 14 | " | 71785 | W. H. Ireland, Trenton. | 3 " | 30 | | |
| " 14 | " | 71786 | W. Webster, Trenton. | 3 " | 30 | Sultana, Montreal. | |
| " 14 | " | 71787 | W. Burnet, Cobourg. | 3 " | 30 | Cleveland Chem. Co., Toronto. | |
| " 14 | " | 71788 | E. Guillet, Cobourg. | 3 " | 30 | Stuart & Foster, Toronto. | |
| " 15 | " | 71789 | A. M. Caroling, Peterboro. | 3 " | 30 | J. T. Taylor, Toronto. | |
| " 15 | " | 71790 | J. E. Lillico, Peterboro. | 3 " | 30 | Moody's, Berlin, Ont. | |

DISTRICT OF TORONTO—

| | | | | | | | |
|---------|--------------------|-------|---|---------|----|--------------------------------|-------------------------|
| Dec. 14 | Household Ammonia. | 70131 | Matheson Bros., Whitby. | 3 pkgs | 15 | S. F. Lawrason Co., London. | |
| " 15 | " | 70132 | T. C. Forman, Port Perry. | 3 " | 25 | Eze Mfg. Co., Toronto. | |
| " 15 | " | 70133 | A. M. MacPhail, Uxbridge. | 3 bots. | 30 | Gorman Eckert Co., London. | |
| " 15 | " | 70134 | J. A. McLean, Cannington. | 3 pkgs | 30 | Pugsley Dingman Co., Toronto. | |
| " 17 | " | 70135 | J. G. French, Beaverton. | 3 " | 30 | | Eby Blain Co., Toronto. |
| " 20 | " | 70136 | N. Sistreron, 395 Wilton Ave., Toronto. | 3 bots. | 30 | Cleveland Chem. Co., Toronto. | |
| " 20 | " | 70137 | W. J. Nichol, 258 Queen St. E., Toronto. | 3 pkgs | 25 | Hutchinson Omand Co., Toronto. | |
| " 21 | " | 70138 | J. H. Porter, 689 Bloor St. W., Toronto. | 3 bots. | 30 | W. Wilson & Son, Toronto. | |
| " 23 | " | 70139 | T. W. Squire, 229 Church St. W., Toronto. | 3 pkgs | 15 | Eze Mfg. Co., Toronto. | |
| " 23 | " | 70140 | C. Byars, 259 Danforth Ave., Toronto. | 3 bots. | 30 | Alpha Chem. Co., Berlin, Ont. | |

DISTRICT OF WINDSOR—

| | | | | | | | |
|---------|-----------------|-------|-------------------------------|--------|----|----------------------------|----------------------------|
| 1916. | | | | | | | |
| Jan. 14 | Liquid Ammonia. | 54564 | A. M. Smith & Son, Woodstock. | 1 bot. | 10 | | M. Maserret & Co., London. |
| " 14 | " | 54567 | Geo. Parker, Woodstock. | 1 " | 10 | Stuart & Foster, Toronto. | |
| " 14 | " | 54569 | E. W. Sage, Woodstock. | 1 " | 10 | Gorman Eckert Co., London. | |

HOUSEHOLD AMMONIA.

| Inspector's Report. (Is not an expression of opinion.) | Name of Brand. | Results of Analysis. | | | | No. of Sample. | Remarks and Opinion of the Chief Analyst. |
|--|----------------|---------------------------|-------------------|------|-------------------|----------------|---|
| | | Ammonia NH ₃ . | Dissolved Solids. | Ash. | Specific Gravity. | | |

S. HOGAN, INSPECTOR.

| | | p.c. | p.c. | p.c. | |
|-----------------|-----------|------|------|------|-------|
| | | 8.36 | | | 71781 |
| | Sun. | 6.12 | | | 71782 |
| | " | 2.24 | | | 71783 |
| | | 8.84 | | | 71784 |
| Bull Dog Brand. | Bull Dog. | 3.90 | | | 71785 |
| | Sultana. | 4.42 | | | 71786 |
| | Hawe's. | 5.22 | | | 71787 |
| | Sun. | 4.14 | | | 71788 |
| | | 4.08 | | | 71789 |
| | Moody's. | 3.52 | | | 71790 |

H. J. DAGER, INSPECTOR.

| | | | | | |
|--|-------------|-------|--|--|-------|
| | Lawrason's. | 2.21 | | | 70131 |
| | Star. | 1.87 | | | 70132 |
| | | 5.32 | | | 70133 |
| | Handy. | 3.23 | | | 70134 |
| | Anchor. | 2.04 | | | 70135 |
| | Hawe's. | 4.86 | | | 70136 |
| | H. O. | 2.38 | | | 70137 |
| | Wilson's. | 11.38 | | | 70138 |
| | Crescent. | 2.62 | | | 70139 |
| | Moody's. | 2.84 | | | 70140 |

JOHN TALBOT, INSPECTOR.

| | | | | | |
|--------------------|--------------|------|--|--|-------|
| Blue Circle Brand. | Blue Circle. | 6.76 | | | 54564 |
| | Sun. | 4.79 | | | 54567 |
| | | 5.76 | | | 54569 |

TABLE I—BULLETIN No. 341—

| Date of Collection. | Nature of Sample. | No. of Sample. | Name and Address of Vendor. | Cost. | | Name and Address of Manufacturer or Furnisher as given by the Vendor. | |
|---------------------|-------------------|----------------|-----------------------------|-----------|--------|---|------------|
| | | | | Quantity. | Cents. | Manufacturer. | Furnisher. |

| DISTRICT OF WINDSOR— | | | | | | | |
|----------------------|-----------------|-------|-------------------------------|--------|----|-------------------------------|-------------------------|
| 1916. | | | | | | | |
| Jan. 14 | Liquid Ammonia. | 54571 | E. J. Coles & Co., Woodstock. | 1 bot. | 10 | J. B. Paine Co., Toronto. | |
| " 14 | " | 54572 | John A. Smith, Woodstock. | 1 " | 10 | Gorman Eckert & Co., London. | |
| " 14 | " | 54574 | White & Co., Woodstock. | 1 " | 10 | " " | |
| " 14 | " | 54576 | Lewis & Son, Woodstock. | 1 " | 10 | I. X. L. Spice & Co., London. | |
| " 20 | " | 54587 | Willis & Co., London. | 1 " | 10 | Gorman Eckert & Co., London. | |
| " 20 | " | 54588 | James McLeod, London. | 1 " | 10 | " " | |
| " 20 | " | 54589 | Dan. Carter, London. | 1 " | 10 | " " | E. Adams & Co., London. |

| DISTRICT OF MANITOBA— | | | | | | | |
|-----------------------|--------------------|-------|----------------------------|--------|----|---------------------------------|--|
| 1915. | | | | | | | |
| Dec. 20 | Household Ammonia. | 71987 | E. A. Whitman, Emerson. | 12 oz. | 25 | Royal Crown Soap Co., Winnipeg. | |
| " 23 | " | 71998 | P. Dalair, Elm Creek. | 12 " | 30 | " " | |
| " 30 | " | 71989 | H. McFelridge, Minnedosa. | 12 " | 15 | J. B. Paine Co., Toronto. | |
| 1916. | | | | | | | |
| Jan. 5 | " | 71990 | J. H. Moore, Souris. | 12 " | 15 | Royal Crown Soap Co., Winnipeg. | |
| " 6 | " | 71991 | A. I. Grocery, Brandon. | 12 " | 15 | Codville Co., Brandon. | |
| " 6 | " | 71992 | MacFee Drug Co., Brandon. | 12 " | 25 | National Drug Co., Winnipeg. | |
| " 6 | " | 71993 | Kennedy Pharmacy, Brandon. | 12 " | 15 | Vendor. | |
| " 6 | " | 71994 | W. J. Young, Brandon. | 12 " | 20 | Gold Standard Co., Winnipeg. | |
| " 6 | " | 71995 | Mutter Bros., Brandon. | 12 " | 15 | J. B. Paine, Toronto. | |
| " 6 | " | 71996 | Ross & McMullen, Virden. | 12 " | 20 | Vendors. | |

| DISTRICT OF SASKATCHEWAN— | | | | | | | |
|---------------------------|--------------------|-------|----------------------------------|---------|----|---------------------------------|------------------------|
| 1915. | | | | | | | |
| Dec. 18 | Household Ammonia. | 71533 | E. R. Davis, Estevan. | 1 pint. | 15 | Martin Bole & Wynne, Winnipeg. | |
| 1916. | | | | | | | |
| Feb. 9 | " | 71547 | Pletch's Grocery, Swift Current. | 1 " | 15 | Royal Crown Soap Co., Winnipeg. | Swift Current Grocery. |
| " 9 | " | 71548 | D. Wodlinger, Swift Current. | 1 " | 15 | J. B. Paine Co., Toronto. | |
| " 10 | " | 71553 | Robinson McBean Co., Moose Jaw. | 1 " | 15 | Stewart & Fisher, Winnipeg. | |
| " 10 | " | 71554 | W. S. Hamilton, Moose Jaw. | 1 " | 15 | The Bole Drug Co., Winnipeg. | |

HOUSEHOLD AMMONIA.

| Inspector's Report. (Is not an expression of opinion.) | Name of Brand. | Results of Analysis. | | | | No. of Sample. | Remarks and Opinion of the Chief Analyst. |
|--|----------------|----------------------------|-------------------|------|-------------------|----------------|---|
| | | Ammonia NH ₃ | Dissolved Solids. | Ash. | Specific Gravity. | | |
| Concluded. | | | | | | | |
| Bull Dog Brand | Bull Dog | 3.40 | | | | 54571 | |
| | | 5.70 | | | | 54572 | |
| | | 5.75 | | | | 54574 | |
| | | 5.40 | | | | 54576 | |
| | | 5.50 | | | | 54587 | |
| | | 5.61 | | | | 54588 | |
| Fan Brand | Fan | 5.66 | | | | 54589 | |

J. B. COSGROVE, TEMPORARY INSPECTOR.

| | | | | | | | |
|--|--|------|------|--|--------|-------|--|
| | | 3.40 | 0.00 | | 0.9868 | 71987 | |
| | | 2.90 | 0.12 | | 0.9894 | 71988 | |
| | | 1.80 | 0.01 | | 0.9926 | 71989 | |
| | | 1.90 | 0.11 | | 0.9934 | 71990 | |
| | | 4.10 | 0.05 | | 0.9832 | 71991 | |
| | | 8.70 | 0.02 | | 0.9634 | 71992 | |
| | | 6.00 | 0.01 | | 0.9750 | 71993 | |
| | | 4.30 | 0.06 | | 0.9827 | 71994 | |
| | | 2.70 | 0.02 | | 0.9891 | 71995 | |
| | | 8.70 | 0.04 | | 0.9633 | 71996 | |

L. H. HALL, INSPECTOR.

| | | | | | | | |
|-------------|-------------|------|------|--|--------|-------|--|
| | | 3.90 | 0.04 | | 0.9840 | 71533 | |
| Royal Crown | Royal Crown | 2.50 | 0.10 | | 0.9905 | 71547 | |
| Bull Dog | Bull Dog | 2.90 | 0.01 | | 0.9875 | 71548 | |
| Sun | Sun | 3.30 | 0.02 | | 0.9864 | 71553 | |
| | | 4.90 | 0.02 | | 0.9799 | 71554 | |

TABLE I—BULLETIN No. 341—

| Date of Collection. | Nature of Sample. | No. of Sample. | Name and Address of Vendor. | Cost. | | Name and Address of Manufacturer or Furnisher as given by the Vendor. | |
|---------------------|-------------------|----------------|-----------------------------|-----------|--------|---|------------|
| | | | | Quantity. | Cents. | Manufacturer. | Furnisher. |

DISTRICT OF ALBERTA—

| | | | | | | | |
|---------|--------------------|-------|--------------------------------|--------|----|-------------------------------------|--|
| 1916. | | | | | | | |
| Feb. 10 | Household Ammonia. | 52371 | J. H. Morris & Co., Edmonton. | 3 bot. | 15 | Royal Crown Soap Ltd., Calgary. | |
| " 10 | " .. | 52372 | G. H. Graydon, Edmonton. | 3 " | 25 | Vendor | |
| " 14 | " .. | 52373 | J. J. Christopher, Wetaskiwin. | 3 " | 30 | Standard Soap Co., Calgary. | |
| " 15 | " .. | 52374 | Younge Bros., Camrose. | 3 " | 25 | Royal Crown Soap Co. Ltd., Calgary. | |
| " 15 | " .. | 52375 | P. J. Hampen, " | 3 " | 25 | Georgeson & Co., Calgary. | |
| " 16 | " .. | 52376 | L. J. Adams, Stettler.... | 3 " | 30 | Royal Crown Soap Co. Ltd., Calgary. | |
| " 22 | " .. | 52377 | John Irwin Co. Ltd., Calgary. | 3 " | 25 | " " .. | |
| " 22 | " .. | 52378 | J. A. Nolan, Calgary. ... | 3 " | 25 | " " .. | |
| " 23 | " .. | 52379 | Geo. J. Wood, " | 3 " | 25 | " " .. | |
| " 23 | " .. | 52380 | Woolard's Grocery, Calgary. | 3 " | 25 | " " .. | |

DISTRICT OF ROCKY MOUNTAINS—

| | | | | | | | |
|---------|--------------------|-------|-------------------------------------|----------|----|----------------------------------|------------------------------|
| 1915. | | | | | | | |
| Dec. 14 | Household Ammonia. | 68112 | Rutherford Drug Co., son. | 1:3 bot. | 45 | Vendors | |
| " 14 | " .. | 68113 | City Drug & Stationery Co., Nelson. | 3 " | 30 | " | |
| " 14 | " .. | 68116 | Canada Drug & Book Co., Nelson. | 3 " | 40 | " | |
| " 14 | " .. | 68117 | Poole Drug Co., Nelson.. | 3 " | 30 | " | |
| 1916. | | | | | | | |
| Jan. 7 | " .. | 68151 | Ira R. Manning, Cranbrook. | 3 " | 40 | ..... | Cranbrook Jobbers, Cranbrook |
| " 10 | " .. | 68158 | D. E. Grove, Ymir... .. | 3 " | 30 | ..... | A. Macdonald & Co., Nelson. |
| " 17 | " .. | 68176 | W. R. Braden, Rossland.. | 3 " | 50 | Vancouver Chem. Wks., Vancouver. | |
| " 17 | " .. | 68177 | Hunter Bros., Rossland .. | 3 " | 35 | Royal Crown Soaps, Vancouver. | |
| Feb. 9 | " .. | 68188 | T. Lauriente & Son, Trail. | 1 bot. | 35 | W. J. Pendray & Sons, Victoria. | |

DISTRICT OF VANCOUVER—

| | | | | | | | |
|---------|--------------------|-------|---|--------|----|----------------------------------|--|
| Jan. 19 | Household Ammonia. | 55468 | Slater Bros., 131 Hastings St., E. Vancouver. | 3 bot. | 40 | Vancouver Chem. Wks., Vancouver. | |
| " 20 | " .. | 55469 | Red Cross Grocery, Robson and Howe Sts., Vancouver. | 3 " | " | Quality Mfg. Co., Vancouver. | |

No. 341-

HOUSEHOLD AMMONIA.

Manufacturer
by

Furnisher.

ALBERTA-

| Inspector's Report. (Is not an expression of opinion.) | Name of Brand. | Results of Analysis. | | | | No. of Sample. | Remarks and Opinions of the Chief Analyst. |
|---|----------------|----------------------------|----------------------|------|----------------------|----------------|--|
| | | Ammonia NH ₃ | Dissolved Solids. | Ash. | Specific Gravity. | | |

A. W. R. MARKLEY, INSPECTOR.

| | | p.c. | p.c. | p.c. | | |
|----------------|------------------|------|------|-------|--------|-------|
| Golden West... | Golden West..... | 1.85 | 6.83 | ..... | 1.0574 | 52371 |
| ..... | ..... | 8.03 | 0.05 | ..... | 0.9662 | 52372 |
| ..... | ..... | 1.37 | 7.23 | ..... | 1.0518 | 52373 |
| Golden West... | Golden West..... | 2.05 | 8.10 | ..... | 1.0698 | 52374 |
| ..... | ..... | 4.36 | 0.06 | ..... | 0.9814 | 52375 |
| Golden West... | Golden West..... | 2.00 | 3.87 | ..... | 1.0282 | 52376 |
| " " | " " | 2.12 | 7.86 | ..... | 1.0666 | 52377 |
| " " | " " | 2.05 | 3.89 | ..... | 1.0282 | 52378 |
| " " | " " | 2.05 | 3.89 | ..... | 1.0279 | 52379 |
| " " | " " | 2.41 | 0.05 | ..... | 0.9898 | 52380 |

NTAINS-

THOS. PARKER, INSPECTOR.

| ..... | ..... | 6.19 | 0.33 | ..... | 0.9768 | 68112 |
|-------|------------------|------|------|-------|--------|-------|
| ..... | ..... | 7.89 | 0.01 | ..... | 0.9661 | 68113 |
| ..... | ..... | 8.13 | 0.01 | ..... | 0.9654 | 68116 |
| ..... | ..... | 6.61 | 0.01 | ..... | 0.9718 | 68117 |
| ..... | ..... | 6.88 | 0.01 | ..... | 0.9706 | 68151 |
| ..... | ..... | 4.24 | 0.01 | ..... | 0.9815 | 68158 |
| ..... | ..... | 3.75 | 0.01 | ..... | 0.9837 | 68176 |
| ..... | Royal Crown.. .. | 4.16 | 0.02 | ..... | 0.9820 | 68177 |
| ..... | ..... | 6.54 | 0.01 | ..... | 0.9719 | 68183 |

FOUVER-

E. J. MORGAN, INSPECTOR.

| ..... | ..... | 7.72 | 0.01 | ..... | 0.9671 | 55468 |
|----------------|---------------|------|------|-------|--------|-------|
| Quality Brand. | Q. liay | 3.33 | 0.01 | ..... | 0.9857 | 55469 |

TABLE I—BULLETIN No. 341—

| Date of Collection. | Nature of Sample. | No. of Sample. | Name and Address of Vendor. | Cost. | | Name and Address of Manufacturer or Furnisher as given by the Vendor. | |
|---------------------|-------------------|----------------|-----------------------------|-----------|-------|---|------------|
| | | | | Quantity. | Cost. | Manufacturer. | Furnisher. |

DISTRICT OF VANCOUVER—

| | | | | | | | |
|---------|--------------------|-------|--|--------|----|---------------------------------------|--|
| 1916. | | | | | | | |
| Jan. 20 | Household Ammonia. | 55470 | S. Pritchard, 950 Robson St., Vancouver. | 3 bots | 45 | W. J. Pendray & Sons, Ltd., Victoria. | |
| " 20 | " .. | 55471 | R. H. Richardson, 1029 Robson St., Vancouver. | 3 " | 75 | Empress Mfg. Co., Vancouver. | |
| " 20 | " .. | 55472 | " " " | 3 " | 45 | W. J. Pendray & Sons, Ltd., Victoria. | |
| " 20 | " .. | 55473 | Hudson's Bay Co., Granville St., Vancouver. | 3 " | 75 | Royal Crown Soaps, Ltd., Vancouver. | |
| " 20 | " .. | 55474 | " " " | 3 " | 75 | S. F. Sutton & Sons, London, Eng. | |
| " 20 | " .. | 55475 | " " " | 3 pkgs | 45 | Pugsley, Dingman & Co., Toronto. | |
| " 22 | " .. | 55476 | New Westminster Co-op. Assn., 33 8th St., New Westminster. | 3 bots | 40 | The Lee Chem. Co., Vancouver. | |
| " 22 | " .. | 55477 | C. A. Welch Ltd., 681 Columbia St., New Westminster. | 3 " | 75 | W. J. Pendray & Sons, Ltd., Victoria. | |

DISTRICT OF VICTORIA—

| | | | | | | | |
|---------|--------------------|-------|--|-------|----|---------------------------------|----------------------------------|
| Feb. 22 | Household Ammonia. | 66655 | Dixie H. Ross, & Co., 1317 Gov't. St., Victoria. | 1 qt. | 25 | | Wm. Jackson, & Co., Victoria. |
| " 22 | " .. | 66668 | The West End Grocery Co., 1002 Gov't. St., Victoria. | 1 " | 20 | W. J. Pendray & Sons, Victoria. | |
| " 24 | " .. | 66675 | H. O. Kirkham & Co., 1109 Gov't. St., Victoria. | 1 " | 20 | " " | |
| " 24 | " .. | 66686 | Acton Bros., 1317 Douglas St., Victoria. | 1 " | 20 | " " | |
| " 28 | " .. | 71307 | L. D. Rives, Menzies and Simcoe Sts., Victoria. | 1 " | 20 | Western Pickling Wks. Victoria. | |
| Mar. 7 | " .. | 71312 | Ivel's Pharmacy, 1415 Gov't. St., Victoria. | 1 " | 20 | | Nat. Drug & Chem. Co., Victoria. |
| " 9 | " .. | 71314 | D. E. Campbell, Douglas and Fort Sts., Victoria. | 1 " | 25 | | " " |
| " 9 | " .. | 71315 | Nat. Drug & Chem. Co., 512 Yates St., Victoria. | 1 " | 15 | Vendor. | |
| " 9 | " .. | 71316 | Ferry's Drug Store, 705 Fort St., Victoria. | 1 " | 15 | " | |
| " 10 | " .. | 71317 | Geo. A. Fraser & Co., 917 Gov't. St., Victoria. | 1 " | 25 | " | |

DISTRICT OF NOVA SCOTIA—

| | | | | | | | |
|---------|--------------------|-------|-------------------------------|--------|----|---------------------------------------|---------------|
| Feb. 18 | Household Ammonia. | 64321 | Wm. Moore, Halifax. | 3 bots | 39 | Bee Starch Co., Montreal. | Unknown |
| " 21 | " .. | 64322 | J. L. Wilson, & Co., Halifax. | 3 " | 39 | Sawyer Crystal Blue Co., Boston Mass. | Manufacturer. |
| " 21 | " .. | 64323 | " " " | 3 " | 30 | Stuart & Foster, Toronto | " |

HOUSEHOLD AMMONIA.

| Inspector's Report. (Is not an expression of opinion.) | Name of Brand. | Result of Analysis. | | | | No. of Sample. | Remarks and Opinions of the Chief Analyst. |
|--|----------------|-------------------------|-------------------|------|-------------------|----------------|--|
| | | Ammonia NH_3 . | Unaltered Solids. | Ash. | Specific Gravity. | | |

Concluded.

| | | p. c. | p. c. | p. c. | | |
|-------------------------------------|-------------------|-------|-------|-------|--------|-------|
| Standard " .. | Standard. | 5.81 | 0.01 | ..... | 0.9752 | 55470 |
| Climax " .. | Climax. | 4.67 | 0.01 | ..... | 0.9799 | 55471 |
| Concentrated... | Concentrated..... | 6.53 | 0.02 | ..... | 0.9722 | 55472 |
| Royal Crown... | Royal Crown..... | 4.40 | 0.03 | ..... | 0.9813 | 55473 |
| Sutton's Compound Cream of Ammonia. | Sutton's. | 11.84 | 0.08 | ..... | 0.9611 | 55474 |
| Handy Brand... | Handy. | 3.41 | 7.31 | ..... |  | 55475 |
| Lee's Liquid Ammonia. | Lee's. | 5.35 | 0.01 | ..... | 0.9769 | 55476 |
| Pendray's Washing Ammonia. | Pendray's | 4.62 | 0.01 | ..... | 0.9804 | 55477 |

D. O'SULLIVAN, INSPECTOR.

| | | | | | | |
|-----------------------|--------------------|-------|------|-------|--------|-------|
| Imperial. | Imperial. | 6.15 | 0.01 | ..... | 0.9735 | 66655 |
| Concentrated. ... | Concentrated. | 6.13 | 0.01 | ..... | 0.9736 | 66668 |
| Absolutely pure. | | 6.39 | 0.01 | ..... | 0.9724 | 66675 |
| Concentrated. ... | Concentrated. | 6.58 | 0.01 | ..... | 0.9719 | 66686 |
| Double strength. | | 5.01 | 0.01 | ..... | 0.9784 | 71307 |
| | | 8.40 | 0.01 | ..... | 0.9641 | 71312 |
| | | 6.12 | 0.01 | ..... | 0.9737 | 71314 |
| | | 2.80 | 0.55 | ..... | 0.9838 | 71315 |
| | | 8.49 | 0.01 | ..... | 0.9637 | 71316 |
| | | 10.76 | 0.01 | ..... | 0.9545 | 71317 |

R. J. WAUGH, INSPECTOR.

| | | | | | | |
|-----------------|----------------|------|-------|-------|-------|-------|
| | Bee. | 3.44 | 0.024 | 0.010 | ..... | 64321 |
| | Sawyer's. | 7.82 | 0.020 | 0.012 | ..... | 64322 |
| Sun Brand. | Sun. | 5.71 | 0.017 | 0.007 | ..... | 64323 |

TABLE II—BULLETIN No. 341—HOUSEHOLD AMMONIA.

| Brand. | Results of Analysis | | | | Brand. | Results of Analysis. | | | |
|-------------------------|--------------------------|-----------------------------------|---|-----------------------|---------------------|--------------------------|-----------------------------------|---|-----------------------|
| | No. of Samples analyzed. | Average p.c. of NH ₃ . | Average price per bottle of approx. 12 ozs. | Price per unit value. | | No. of Samples analyzed. | Average p.c. of NH ₃ . | Average price per bottle of approx. 12 ozs. | Price per unit value. |
| | | | | | | | | | |
| | | p.c. | cts. | p.c. | | | p.c. | cts. | p.c. |
| Sun..... | 20 | 4.24 | 11 | 2.594 | Canada Drug Co..... | 1 | 4.98 | 10 | 2.000 |
| Bee..... | 5 | 5.05 | 11 | 3.606 | Matheways..... | 1 | 2.85 | 10 | 3.508 |
| Hartshorn's Morins..... | 2 | 7.30 | 21 | 2.890 | Baird's..... | 1 | 2.41 | 10 | 4.149 |
| " Livermois..... | 1 | 16.22 | 20 | 1.233 | National..... | 1 | 5.64 | 10 | 1.773 |
| Bull Dog..... | 5 | 2.53 | 18 | 7.114 | Entente..... | 1 | 1.29 | 10 | 7.752 |
| Sapho..... | 2 | 2.49 | 12 | 4.819 | Murrays..... | 1 | 4.97 | 10 | 2.012 |
| Sawyers..... | 2 | 7.83 | 14 | 1.788 | Blue Circle..... | 1 | 6.76 | 20 | 2.968 |
| Sultana..... | 12 | 5.90 | 12 | 3.077 | Fan..... | 1 | 5.66 | 10 | 1.770 |
| Moody's..... | 4 | 3.18 | 10 | 3.144 | Quality..... | 1 | 3.33 | 10 | 3.003 |
| Dearborn..... | 5 | 4.52 | 10 | 2.212 | Standard..... | 1 | 5.81 | 10 | 1.721 |
| Hawes..... | 2 | 5.04 | 10 | 1.984 | Climax..... | 1 | 4.67 | 16 | 3.426 |
| Royal Crown, Vancouver | 10 | 4.28 | 18 | 4.205 | Suttons..... | 1 | 11.84 | 25 | 2.195 |
| Golden West..... | 1 | 2.09 | 27 | 12.918 | Lees..... | 1 | 5.35 | 8 | 1.495 |
| Concentrated..... | 3 | 6.41 | 12 | 1.872 | Pendrays..... | 1 | 4.62 | 12 | 2.597 |
| Gorman Eckert..... | 6 | 5.60 | 10 | 1.789 | Imperial..... | 1 | 6.15 | 16 | 2.601 |
| Royal Crown, Winnipeg. | 4 | 2.68 | 20 | 7.462 | Chemical Co..... | 1 | 4.66 | 15 | 3.218 |
| Simonds..... | 1 | 2.98 | 10 | 3.355 | Wilsons..... | 1 | 11.38 | 10 | 0.878 |
| National Drug Co..... | 1 | 6.89 | 10 | 1.451 | | | | | |

| No brand given. No. of sample. | Results of Analysis. | | | | No brand given. No. of sample. | Results of Analysis. | | | |
|--------------------------------|--------------------------|----------------------|---|-----------------------|--------------------------------|--------------------------|----------------------|---|-----------------------|
| | No. of Samples analyzed. | Average p.c. of NH3. | Average price per bottle of approx. 12 oza. | Price per unit value. | | No. of Samples analyzed. | Average p.c. of NH3. | Average price per bottle of approx. 12 oza. | Price per unit value. |
| | | | | | | | | | |
| | | Cents. | | | | | Cents. | | |
| 56632..... | 1 | 23.80 | 30 | 1.260 | 71554..... | 1 | 4.90 | 10 | 2.040 |
| 56633..... | 1 | 5.95 | 18 | 3.025 | 52372..... | 1 | 8.03 | 10 | 1.245 |
| 56634..... | 1 | 24.80 | 30 | 1.209 | 52373..... | 1 | 1.37 | 10 | 7.259 |
| 56635..... | 1 | 23.50 | 24 | 1.021 | 52375..... | 1 | 4.36 | 10 | 2.293 |
| 56636..... | 1 | 10.45 | 15 | 1.436 | 68112..... | 1 | 6.19 | 15 | 2.423 |
| 56637..... | 1 | 7.85 | 20 | 3.548 | 68113..... | 1 | 7.89 | 20 | 2.594 |
| 56639..... | 1 | 15.64 | 18 | 1.150 | 68116..... | 1 | 8.13 | 26 | 3.197 |
| 56641..... | 1 | 6.64 | 30 | 4.518 | 68117..... | 1 | 6.61 | 20 | 3.025 |
| 3664..... | 1 | 6.42 | 30 | 4.672 | 68151..... | 1 | 6.88 | 10 | 1.453 |
| 71781..... | 1 | 8.36 | 10 | 1.196 | 68158..... | 1 | 4.24 | 10 | 2.358 |
| 71784..... | 1 | 8.84 | 24 | 2.714 | 68176..... | 1 | 3.75 | 25 | 6.086 |
| 54578..... | 1 | 5.40 | 10 | 1.851 | 68183..... | 1 | 6.54 | 25 | 3.822 |
| 71989..... | 1 | 1.80 | 15 | 8.333 | 55468..... | 1 | 7.72 | 15 | 1.943 |
| 71991..... | 1 | 4.10 | 15 | 3.658 | 66675..... | 1 | 6.39 | 12 | 1.877 |
| 71992..... | 1 | 8.70 | 25 | 2.673 | 71307..... | 1 | 5.01 | 12 | 2.396 |
| 71993..... | 1 | 6.00 | 15 | 2.600 | 71312..... | 1 | 8.40 | 12 | 1.428 |
| 71994..... | 1 | 4.30 | 20 | 4.651 | 71314..... | 1 | 6.12 | 12 | 1.960 |
| 71995..... | 1 | 2.76 | 15 | 5.555 | 71315..... | 1 | 2.80 | 10 | 3.571 |
| 71996..... | 1 | 8.70 | 30 | 3.448 | 71316..... | 1 | 8.49 | 10 | 1.177 |
| 346..... | 1 | 7.56 | 20 | 2.645 | 71317..... | 1 | 10.76 | 16 | 1.486 |
| 71533..... | 1 | 3.90 | 10 | 2.566 | 71789..... | 1 | 4.6 | 10 | 2.450 |

TABLE II—BULLETIN 341—HOUSEHOLD AMMONIA.

SAMPLES OF DRY AMMONIA.

| Brand. | Results of Analysis. | | | | Brand. | Results of Analysis. | | | |
|---------------------------|--------------------------|-----------------------------------|---------------------------------|-----------------------|-----------------|--------------------------|-----------------------------------|---------------------------------|-----------------------|
| | No. of Samples analyzed. | Average p.c. of NH ₃ . | Average price per pound approx. | Price per unit value. | | No. of Samples analyzed. | Average p.c. of NH ₃ . | Average price per pound approx. | Price per unit value. |
| | | | Cents | | | | | Cents | |
| Lawrason's Snowflake. . . | 4 | 2.63 | 5 | 1.901 | Good. | 1 | 2.45 | 5 | 2.040 |
| Handy. | 5 | 3.40 | 5 | 1.470 | Anchor. | 1 | 2.04 | 5 | 2.450 |
| Star. | 2 | 1.78 | 7 | 3.932 | H.O. | 1 | 2.38 | 5 | 2.100 |
| Crescent. | 2 | 3.49 | 4 | 1.145 | Bee. | 2 | 1.87 | 5 | 2.673 |

analysis.

per bottle or
approx. 12 ozs.
Price per unit
value.

s. p.c.
10 2.000
10 3.508
10 4.149
10 1.773
10 7.752
10 2.012
20 2.968
10 1.770
10 3.003
10 1.721
16 3.426
25 2.195
8 1.495
12 2.597
16 2.601
15 3.218
10 0.878

analysis.

approx. 12 ozs.
Price per unit
value.

2.040
1.245
7.259
2.293
2.423
2.534
3.197
3.025
1.453
2.358
6.066
3.822
1.943
1.877
2.395
1.428
1.960
3.571
1.177
1.486
2.450